

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Final Office Action dated February 22, 2010 and the Advisory Action dated July 8, 2010. In view of the above amendments and the following remarks,, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

As outlined above, claims 11-20, 22-31, 34, and 35 stand for consideration in this application, wherein claims 21, 32, and 33 are being canceled without prejudice or disclaimer, and wherein claims 11-17, 20, 22-29, 34 and 35 are being amended to improve form. All amendments to the application are fully supported therein. In particular, the above amendments to the claims are merely being made for purposes of clarification and improving form. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

Examiner Interview Summary

A telephone interview was held with Examiner Tang on July 12, 2010, relating to the above-identified application. During the interview, Applicant reiterated and further clarified the arguments submitted in the Response filed on May 21, 2010 with reference to the distinctions between the cited prior art and the limitation recited in independent claim 1 that “the number of objects or occupied area ratio displayed is changed in accordance with the running speed of the vehicle by using the changing priorities,” as well as with the similar limitation recited in independent claim 23). In particular, Applicants emphasized that the area referred to by the term “occupied area ratio” in claim 11 (and, similarly, in claim 23) is an area of a display screen, while, in contrast, scale referred to in the Nakayama reference is an area of a road map.

In response, the Examiner stated that the claim limitation of “the number of objects or occupied area ratio displayed is changed in accordance with the running speed of the vehicle by using the changing priorities” could be made clearer by amendment the claim to explicitly indicate that the recited “occupied area ratio” is defined in terms of a display screen area.

Prior Art Rejections

Claims 11-13, 20-25, and 32-35 were rejected under 35 U.S.C. §103(a) as being unpatentable over Moroto (U.S. Patent No. 5,121,326) in view of Nakayama (U.S. Patent No. 5,732,385). Claims 14-19 and 26-31 were rejected under 35 U.S.C. §103(a) as being unpatentable over Moroto in view of Nakayama, and in further view of Katou (U.S. Patent No. 6,006,161). Applicants have reviewed the above-noted rejections, and hereby respectfully traverse.

As outlined above, claims 11-20, 22-31, 34, and 35 remain of record. A proper obviousness rejection that relies on a combination of prior art elements requires establishing that the prior art references, when combined, teach or suggest all of the claim limitations. MPEP §2143. Furthermore, “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385 (C.C.P.A. 1970). That is, to render a claim obvious under 35 U.S.C. §103, a determination must be made that the claimed invention “as a whole” would have been obvious to person of ordinary skill in the art when the invention was unknown and just before it was made. MPEP §2142. Accordingly, Applicants respectfully submit that Moroto, either alone or in combination with Nakayama and/or Katou, fails to show each and every limitation of claims 11-20, 22-31, 34, and 35.

For example, none of the cited references teach or suggest that “a number of objects or an occupied area ratio of objects displayed in the display screen is changed in accordance with the running speed of the vehicle by using the changing priorities” as required by independent claim 11. As noted by the Examiner on page 4 of the Final Office Action, Moroto fails to teach or suggest this required limitation of claim 11. Instead, the Examiner cites Figure 3 of Moroto as disclosing “the changing priorities” and Nakayama as disclosing that “the number of objects or occupied area ratio displayed is changed in accordance with the running speed of the vehicle,” stating that Nakayama provides “the concept of using a vehicle’s speed in combination with a number of objects (occupied area ratio)” with the description that “the higher the vehicle speed is, the broader will be the road map range; or the lower the vehicle speed is, the narrower will be the road map range, so that the more detail road map near the current vehicle position can be displayed at low vehicle speed.” (Col. 13, ll. 32-35). The Examiner further states that the references in Nakayama to a “more detail road map” and the “narrower...road map range” correspond to the claimed recitations of “number of objects” and “occupied area ratio” respectively. Applicants respectfully disagree.

With reference to the limitations recited of in claim 11 of “a numbers of objects...displayed in the display screen” and “an occupied area ratio of objects displayed in the display screen,” the present application explains in paragraph [0045] that “a table is set for determining the display limit amount for each type of object (a display element such as character/symbol and a road) **in accordance with the screen size of the display unit 7**. This limit amount may be set in terms of the number or the ratio of the occupied area to the area of the display screen 10 (=Total area (number of pixels) occupied by display elements/Area of display screen 10 (number of pixels)).” (Emphasis added). As an example of setting such an occupied area ratio for a display screen size of 6 inches, the present application provides that “a maximum of 30 characters/symbols (or maximum of 20% in occupied area ratio) can be displayed, and a maximum of 50 roads (or maximum of 30% in occupied area ratio) can be displayed.” (Para. [0047]) (emphasis added).

That is, the present application explicitly describes an “occupied area ratio” as describing a ratio of a total number of display pixels used in displaying components such as characters, symbols, and roads to the total number of pixels of a display screen. In contrast, Nakayama simply teaches changing a contraction scale ratio corresponding to an amount of a map being displayed to the total size of the map and includes no mention or suggestion of anything related to changing a number of objects displayed or a ratio an amount of a display screen occupied by the elements being displayed. The area referred to by the term “occupied area ratio” in claim 11 is an area of a display screen. The scale referred to in Nakayama, however, is an area of a road map. The present invention, as indicated by the phrase “[o]n the other hand” at the beginning of paragraph [0045], explicitly distinguishes the concept of “an occupied area ratio” from “an area including the route area 31 and having the same aspect ratio as the display screen 10 of the display unit 7 [that] is determined as a map display area 33. This map display area 33 is determined as a display range at step 103.” (Para. [0044]).

In contrast to claim 11, Nakayama explains that “when the vehicle travels at high speed, the driver wishes **to see a point far from the current vehicle position on the road map**. On the other hand, when the vehicle travels at low speed, **the driver wishes to see a point near the current vehicle position on the same road map in detail**.” (Cols. 2-3, ll. 65-3) (emphasis added). For this purpose, Nakayama describes a vehicle navigation system in which “when the vehicle speed is high, the broader road map can be displayed; and when the vehicle speed is low, the narrower road map near the current vehicle position can be displayed in detail.” (Col. 14, ll. 59-62). That is, Nakayama describes that as the speed of a vehicle decreases, a smaller range of a road map is displayed but the smaller range that is

displayed in more detail. The result is that, in contrast to claim 11, the number of objects displayed in the display screen or an occupied area ratio of the objects displayed in the display screen does not change in accordance with the running speed of the vehicle. Rather, a display screen displaying a broader range of a road map less detail will display substantially the same number of objects or occupied area ratio of the objects as a display screen displaying a narrower range of the road map in greater detail.

Thus, during operation of the system described in Nakayama, the number of objects displayed in a display screen or an occupied area ratio of objects displayed in a display screen remains substantially the same as the running speed of a vehicle changes. Nakayama explicitly states that this is the purpose of the system described therein: “[W]hen the vehicle speed is very high, since the road network information to be displayed on the display unit 8 increases excessively, the road map is not easy to see. In this case, it is preferable to display only the important information related to an express highway or a major road, for instance.” (Col. 13, ll. 50-55). Therefore, it is clear that such a display map that displays **a broader range of a road map in less detail or a narrower range of a road map in greater detail** based on the speed of a vehicle, as described in Nakayama, is clearly not a summarized map in which **a number of objects or an occupied area ratio of objects displayed in the display screen** is changed based on a running speed of a vehicle, as required by claim 11.

Moreover, claim 11 explicitly requires that “a number of objects or an occupied area ratio of objects displayed in the display screen is changed in accordance with the running speed of the vehicle by using the changing priorities.¹” In this regard, Applicants emphasize that “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385 (C.C.P.A. 1970). None of the references cited by the Examiner include any mention or suggestion of any aspect of a display of a map being changed by using the changing priorities for roads that are set in accordance with a change in a guide route. Furthermore, even if Nakayama were to actually teach “a number of objects or an occupied area ratio of objects displayed in the display screen is changed in accordance with the running speed of the vehicle,” and Moroto were to actually teach “changing the priorities in said table set for the roads,” as stated by the Examiner on pages 4-5 of the Office Action, this would simply constitute of a teaching that “a number of objects or an occupied area ratio of objects displayed in the display screen is changed in accordance with the running speed of the vehicle,” and, separately, “changing the priorities in said table set for the roads.”

That is, the cited references do not include any mention or suggestion of any “using” of any changing priorities for changing the number of objects or the occupied area ratio of objects displayed in a display screen in accordance with a running speed of a vehicle, as required by claim 11, and, moreover, neither the Final Office Action dated February 22, 2010 nor the Advisory Action dated July 8, 2010 includes any assertion of any of the cited references teaching the actual using of any changing priorities for changing the number of objects or occupied area ratio displayed in accordance with a running speed of a vehicle made in the Final Office Action. To render a claim obvious under 35 U.S.C. §103, however, a determination must be made that the claimed invention “as a whole” would have been obvious to person of ordinary skill in the art when the invention was unknown and just before it was made. MPEP §2142.

Furthermore, Katou also fails to teach or suggest that “a number of objects or an occupied area ratio of objects displayed in the display screen is changed in accordance with the running speed of the vehicle by using the changing priorities,” as required by claim 11. Katou merely describes a land vehicle navigation apparatus that includes “a display monitor unit for displaying a guidance screen with a map and other information relating to the route search and route guidance in a one-screen mode, or in a multiple-screen mode” and a display controller that a “schematic diagram screen on the one screen when the vehicle is traveling on a highway or expressway. Alternatively, the display controller displays [an] architectural structure shape map screen on the one screen when the vehicle is traveling within towns or cities. Where a characteristic object of interest is present ahead of the present position, the display controller operates to display a screen containing information relating to the characteristic object.” (Abstract; col. 2, ll. 44-53). A multi-screen guidance map upon which the type of map displayed is based on the type of road or region is vehicle is traveling on, as provided in Katou, is clearly not a summarized map in which the number of objects or occupied area ratio displayed is changed in accordance with the running speed of the vehicle by using the changing priorities for roads that are set in accordance with a change in a guide route, as required by claim 11.

For at least these reasons, Applicants respectfully submit that none of the cited references teach or suggest that “a number of objects or an occupied area ratio of objects displayed in the display screen is changed in accordance with the running speed of the vehicle by using the changing priorities” as required by claim 11. Accordingly, Applicants respectfully submit that Moroto, either alone or in combination with Nakayama and/or Katou, fails to teach or suggest each and every limitation of claim 11 and, therefore that claim 11 is

now in condition for allowance. For at least similar reasons to those discussed above with reference to claim 11, Applicants respectfully submit that none of the cited references teach or suggest the similar limitation required by claim 23 of “changing a number of objects or an occupied area ratio of objects displayed in the display screen in accordance with the running speed of the vehicle by using the changing priorities” and, therefore, that claim 23 is therefore also now in condition for allowance.

Where an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. *In re Fine*, 5 U.P.S.Q.2d 1596, 1598 (Fed. Cir. 1988). Because Moroto, either alone or in combination with Nakayama and/or Katou, fails to teach, disclose, or suggest each and every limitation of claims 11 and 23, and because claims 12-20 and 22 and claims 24-31, 34, and 35 depend either directly or indirectly from claims 11 and 23 respectively, Applicants respectfully submit that Moroto, either alone or in combination with Nakayama and/or Katou, does not render obvious claims 12-20 and 22 and claims 24-31, 34, and 35 for at least the reasons set forth above that the references do not render obvious claims 11 and 23 respectively and, therefore, that claims 12-20, 22, 24-31, 34, and 35 are also now in condition for allowance.

Therefore, Applicants respectfully submit that the present invention as claimed is distinguishable and thereby allowable over the prior art of record.

Conclusion

In view of all the above, Applicants respectfully submit that certain clear and distinct differences as discussed exist between the present invention as claimed and the prior art references upon which the rejections in the Final Office Action rely. These differences are more than sufficient that the present invention as claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and phone number indicated below.

Respectfully submitted,

Nicholas B. Trenkle
Registration Number 54,500

Dorey Lee E Jackson #28,578

Juan Carlos A. Marquez
Registration Number 34,072

STITES & HARBISON PLLC
1199 North Fairfax Street
Suite 900
Alexandria, VA 22314-1437
(703) 739-4900 Voice
(703) 739-9577 Fax
Customer No. 38327

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